BRUHATH BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE ELECTRICAL DIVISION

Name of the work :- Detaild estimate for Electrical Installation and Rewiring of Primary Health Center and BBMP Buildings Coming Under Yelahanka Zone.

Budget Head: P0294

Division No..... Estimate No. .....

Est Cost Rs. **600000.00**

Sl. No	SR Page No	Description	Unit	Qty	Rate	Amount
1	02/1.1.1 PWD Ele SR 2-23-24	Supplying heavy gauge PVC conduit pipe.....dia.....mm thick confirming to IS2509 with suitable size bends, junction boxes, adhesive paste etc, and fixing using inverted wood plugs incase of RCC ceiling and RCC wall/stone structure or rawl plugs incase of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.19/20 mm dia 2 mm thick	m	150	69.00	10350.00
2	02/1.1.2 PWD Ele SR 2-23-24	Supplying heavy gauge PVC conduit pipe.....dia.....mm thick confirming to IS2509 with suitable size bends, junction boxes, adhesive paste etc, and fixing using inverted wood plugs incase of RCC ceiling and RCC wall/stone structure or rawl plugs incase of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.25 mm dia 2 mm thick	m	60	81.00	4860.00
3	03/1.7.1 PWD Ele SR 2-23-24	Extra for Groove cutting in brickwall /CC floor to the suitable depth for concealing of Conduit/ GI pipe and plastering, finishing upto wall surface complete.upto 50 mm conduit in brick wall	m	50	29.00	1450.00
4	03/1.7.2 PWD Ele SR 2-23-24	Extra for Groove cutting in brickwall /CC floor to the suitable depth for concealing of Conduit/ GI pipe and plastering, finishing upto wall surface complete.upto 50 mm conduit CC floor	m	50	69.00	3450.00
5	03/1.8.2 PWD Ele SR 2-23-24	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, junction box,elbows,screwsatan interval of 300 mm as required.25 mm	m	30	35.00	1050.00
6	03/1.9.2 PWD Ele SR 2-23-24	Supplying PVC flexible conduit pipe....mm dia fixing on surface over inverted tape red wooden plugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and on either end of the pipe terminated completely.25 mm	m	20	22.00	440.00
7	08/3.3.2 PWD Ele SR 2-23-24	Supplying and fixing surface /flush mounting unbreakable PVC modular box suitable for mounting modular switch plate swith due groove cutting in Brick /C.Cwall, including necessary rawlplugs,Machine/NF screws etc., complete.3 Way	Each	20	124.00	2480.00
8	08/3.3.4 PWD Ele SR 2-23-24	Supplying and fixing surface /flush mounting unbreakable PVC modular box suitable for mounting modular switch plate swith due groove cutting in Brick /C.Cwall, including necessary rawlplugs,Machine/NF screws etc., complete.6 Way	Each	30	173.00	5190.00
9	08/3.3.5 PWD Ele SR 2-23-24	Supplying and fixing surface /flush mounting unbreakable PVC modular box suitable for mounting modular switch plate swith due groove cutting in Brick /C.Cwall, including necessary rawlplugs,Machine/NF screws etc., complete.8 Way	Each	20	219.00	4380.00
10	08/3.5.2 PWD Ele SR 2-23-24	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/ PVC box.3 Module	Each	20	161.00	3220.00

11	08/3.5.4 PWD Ele SR 2-23-24	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/ PVC box.6 Module	Each	30	234.00	7020.00
12	08/3.5.5 PWD Ele SR 2-23-24	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/ PVC box.8 Module	Each	20	284.00	5680.00
13	05/2.2.1 PWD Ele SR 2-23-24	Point wiring using Copper wire without switch. Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using 2x1.5 Sqmm (Phase&Neutral) & 1x1.0 sqmm (Earthwire) FRLS multi strand PVC insulated copper wire (confirming to IS-694: and latest amendments)without control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminatedwith sufficient loose length in a wood/PVC round block. complete for each outlet.Short point upto 3Mtr from tapping point to out let via switch box	Point	70	269.00	18830.00
14	05/2.2.1 PWD Ele SR 2-23-24 2.2.2	Point wiring using Copper wire without switch. Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using 2x1.5 Sqmm (Phase&Neutral) & 1x1.0 sqmm (Earthwire) FRLS multi strand PVC insulated copper wire (confirming to IS-694: and latest amendments)without control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminatedwith sufficient loose length in a wood/PVC round block. complete for each outlet. Medium point above 3 Mtr upto 6Mtr from tapping point toout letvia switch box	Point	20	379.00	7580.00
15	05/2.3.1 PWD Ele SR 2-23-24	Wiring for lighting /power circuit using one of FRLS PVC insulated 1100V grade,multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:2010.1 Sq mm	m	800	19.00	15200.00
16	05/2.3.2 PWD Ele SR 2-23-24	Wiring for lighting /power circuit using one of FRLS PVC insulated 1100V grade,multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:2010.1.5 Sq mm	m	400	26.00	10400.00
17	05/2.3.4 PWD Ele SR 2-23-24	Wiring for lighting /power circuit using one of FRLS PVC insulated 1100V grade,multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:2010.4 Sq mm	m	200	63.00	12600.00
18	06/2.5.1 PWD Ele SR 2-23-24	Supplying and drawing Flexible Multi core Cable manufacture dwith electrolytic grade flexible copper with low conductor confirming to IS8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100 Volts as per IS-694:1990.2C x 1.5 Sq mm	m	200	53.00	10600.00
19	06/2.5.9 PWD Ele SR 2-23-24	Supplying and drawing Flexible Multi core Cable manufacture dwith electrolytic grade flexible copper with low conductor confirming to IS8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100 Volts as per IS-694:1990.4C x 2.5 Sq mm	m	50	148.00	7400.00
20	09/3.6.1 PWD Ele SR 2-23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6A One Way Switch	Each	150	102.00	15300.00
21	09/3.6.2 PWD Ele SR 2-23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6A Two Way Switch	Each	10	166.00	1660.00
22	09/3.6.4 PWD Ele SR 2-23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.Stepped Fan Regulator Two Module	Each	10	357.00	3570.00

23	09/3.6.7 PWD Ele SR 2-23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.16A One Way Switch	Each	10	180.00	1800.00
24	09/3.6.9 PWD Ele SR 2-23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.32A DP Switch	Each	10	326.00	3260.00
25	09/3.6.10 PWD Ele SR 2-23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6/16A Universal Socket	Each	10	236.00	2360.00
26	15/5.8.1 PWD Ele SR 2-23-24	Supplying of Switch disconnector fuse unit (TPN)HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947. 63 A	Each	5	2312.00	11560.00
27	15/5.8.2 PWD Ele SR 2-23-24	Supplying of Switch disconnector fuse unit (TPN)HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947. 100 A	Each	5	4503.00	22515.00
28	15/5.9.2 PWD Ele SR 2-23-24	Supplying and fixing HRC fuse units base on existing switch / panel board.32 to 63 A	Each	6	612.00	3672.00
29	16/5.13.2 PWD Ele SR 2-23-24	Supply and fixing of 3 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.40 A	Each	3	2258.00	6774.00
30	18/5.19.1 PWD Ele SR 2-23-24	Supplying and fixing regular MCB distribution boards onwall/ Wood board / flush mounting using required clamps, bolts, nuts etc.,with provision for fixing suitable type capacity MCB's single phase/3 phase/ single door with powder coated painting Made out of 14SWG MS enclosure. I - Single Door 4 Way SP & N	Each	4	1241.00	4964.00
31	17/5.18.1 CSR 23-24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32Amps SP	Each	5	415.00	2075.00
32	17/5.18.4 CSR 23-24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32 Amps DP	Each	5	739.00	3695.00
33	17/5.18.8 CSR 23-24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.40 Amps TPN	Each	5	3044.00	15220.00
34	30/6.3.1 CSR 23-24	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374- 1979 and with double ball bearing system.48" Sweep (1200mm) Regular model	Each	10	2984.00	29840.00
35	30/6.5.1 CSR 23-24	Supplying wall mounting fan suitable to operate at single-phase 230v A.C. supply.400mm Sweep	Each	10	2492.00	24920.00
36	47/ 11.11.4 CSR 23-24	Supplying & fixing of retrofit type-LED bulb.....W with OPAL acrylic diffuser comprising of LED source with CCT6500 degree K,CRI>70%. efficacy>80 lumen per W, life>25000 burning hours and Compliance to IS 10322/ IEC60598, LM79 & LM80 .The LED are driven by HF electronic driver integrated in the system, with PF>0.95, power loss should.9W, 6500K	Each	30	154.00	4620.00

37	47/ 11.11.6 CSR 23-24	Supplying & fixing of retrofit type-LED bulb.....W with OPAL acrylic diffuser comprising of LED source with CCT6500 degree K,CRI>70%. efficacy>80 lumen per W, life>25000 burning hours and Compliance to IS 10322/ IEC60598, LM79 & LM80 .The LED are driven by HF electronic driver integrated in the system, with PF>0.95, power loss should.15W, 6500K	Each	30	326.00	9780.00
38	43/11.3.2 CSR 23-24	Supplying of .....feet -PVC Batten with integrated LED tube .... W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V@ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition.LED light fitting 1 x 4' - 20/22 W	Each	25	690.00	17250.00
39	44/11.4. 3 CSR 23-24	Supplying of recess mounting non integrated type LED down light ..... W luminaire comprising of pressure decast/ extruded aluminium housing, with spring loaded false ceiling clamps, LED of Power/COB with CCT 6500 degree K, CRI> 70%. efficacy >100 lumen per watt, 120degree beam spread, life> 25000 burning hours and Compliance to IS 10322/IEC 60598, LM 79 & LM 80. The lamp compartment is enclosed with anti glare opal diffuser which enhances the lighting level. LEDs are driven by HF electronic driver integrated in a separate control gear assembly., with PF > 0.95, power loss should < 5% of lamp wattage., short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, Life as per LM 79. The operating input voltage should be between 130 to 275 volts. BIS Approved and Tested by NABL/CPRI accredited laboratory with 2 years Warranty against any manufacturing defect working under standard electrical condition.15-18W	Each	15	1671.00	25065.00
40	44/11.5.3 CSR 23-24	Supply of round/square recess/surface mounted rolling type LED Down light with .....W GU 10 LED Lamp Rib Fabricated from Die cast aluminium with white powder coated prewired to mains connector & has swiveling unit of aluminium die cast eye ball & LED Lamp position retained by circular wire spring, with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition LED square or round down light 15-18W	Each	10	1324.00	13240.00
41	38/5.13.2 PWD Ele SR 2-23-24	Supplying, erecting, testing & commissioning of ON-LINEUPS system suitable for operation on 230V, 50Hz, A/C supply, with isolation transformer allaccessories complete and Excluding batteries and wiring complete. 3 kVA ON LINE UPS	Each	1	38719.00	38719.00
42	39/9.5.10 PWD Ele SR 2-23-24	Supplying, installation, testing & commissioning of 12VDC, AH batteries inpolypropylene container for U.P.S. Sealed maintenance free batteries.200AH capacity	Each	1	20668.00	20668.00
43	39/9.5.10 PWD Ele SR 2-23-24	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5m long buried in a pit .The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth.The connection from the pipe to the conduit etc., is to be established through GI wire of size as per lSI specification 7.3.3. of IS732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	Each	5	3510.00	17550.00
44	13/32.08 CSR 2023-24	Laying of cable in Existing Trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminum Rollers as directed by the departmental staff LT Cable 35 to 95 Sqmm	KM	0.20	31139.00	6227.80

45	13/32.09 CSR 2023-24	1.1 kV, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975.25 Sqmm, 35 Sqmm, 3.5 Core, (14 GI Strips - 4 x 0.8 mm)	KM	0.20	154062.00	30812.40
46	20/5.41.1 CSR 2023-24	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.40 x 40 x 6 mm	m	4.00	305.00	1220.00
47	56/13.5 CSR 2023-24	Fixing halogen/metal halide /SVL/IL/LED floodlight fitting over existingpole /wall ceiling including clamps, bolts, nutsand wiring using suitable capacity wires.	Each	3.00	162.00	486.00
48	46/11.9.4 CSR 2023-24	upply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Floodlight 150W	Each	3.00	12490.00	37470.00
		Total Rs				**508473.20**
		Add 18 % GST on Total				91525.18
		Misscelleneous charges				1.62
		TOTAL				**600000.00**

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD(Elec) SR of 2022-23 and Approved Rate.

Asst. Engineer (Elec)

Administrative Sanction for Rs. 600,000=00 Six LAKHS ONLY is accorded under head PO294 Mandate ELECTRICAL INSTALLATIONS IN BBMP BUILDINGS SCHOOLS Registered as EE No. 42/2024-25 Subject to conditions contained in enclosed memo No. BBMP/EE(El)/42/AS/42/24-25 Dt 07.01.2025

Executive Engineer

TECHNICALLY SANCTIONED FOR Rs. 600000=00 Rupees Six LAKHS ONLY Under PO294 M-AND R TO ELECTRICAL INSTALLATIONS IN BBMP BUILDINGS Subject to conditions contained in enclosed memo No. BBMP/EE(El)/42/AS/2024-25 Dt. 07-01-2025 Estimate A/ Sanctioned No. BBMP/EE(El)42/TS/2024-25 Dated 07.01.2025 Rs. 600000=00

Asst. Exe. Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELAHANKA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer